

Health Impact Assessments: Linking EPA Research to Community Decisions

Institute of Medicine
Roundtable on Population Health Improvement

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- EPA ORD's Sustainable and Healthy Communities Research Program
- Health Impact Assessment
- Linking Health Impact Assessment and SHC Research
- Case Study: HIA of *Proctor Creek Boone Boulevard Green Street Project*



EPA's Office of Research and Development

ORD is the research arm of the EPA, providing scientific methods and technology to safeguard human and environmental health.

Six plans to guide ORD research:

- *Human Health Risk Assessment*
- *Homeland Security*
- *Air, Climate and Energy*
- *Safe and Sustainable Water Resources*
- *Chemical Safety for Sustainability*
- *Sustainable and Healthy Communities*



ORD's Sustainable and Healthy Communities (SHC) Program

A Sustainable Community

- protects the health and well-being of all residents
- increases its returns on public investments
- provides new business opportunities
- conserves its natural resources and open space

Communities often focus on only one of these objectives

The SHC program is based on the principle that a systems-approach will improve a community's ability to simultaneously address all of these objectives



ORD's Sustainable and Healthy Communities (SHC) Program

The vision of ORD's SHC program is to inform and empower communities to include human health, economic, and environmental factors into their decisions in a way that fosters community sustainability

i.e., actionable science for communities

Focus on four sectors:

- Transportation
- Housing/Buildings/Infrastructure
- Land-use planning
- Waste management/site revitalization





Health Impact Assessment

HIA is a process that uses
scientific data, health expertise and public input
to factor public health considerations into the decision-making process

- HIAs can give state and local decision makers the information they need to consider public health in pending plans, policies or projects, such as:
 - Mass transit and highway and bridge design
 - Housing and energy assistance programs
 - Comprehensive planning and growth policies
 - Energy programs and natural resource management, including fossil fuel exploration and development , renewable energy and water management policies



Health Impact Assessment

Major steps in conducting an HIA include:

- **screening** (identify projects for which HIA would be useful)
- **scoping** (identify which health impacts to consider),
- **assessing risks and benefits** (identify which people may be affected and how they may be affected)
- **developing recommendations** (suggest changes to proposals to promote positive or mitigate adverse health effects),
- **reporting** (present the results to decision-makers)
- **evaluating** (determine the affect of the HIA on the decision process).



HIA Relevance to ORD's SHC Program

Growing HIA community of practice in US can:

- **Inform SHC research:**
 - What decisions are communities facing?
 - How they are bringing health, economic and environmental information to the process?
- **Provide a network to:**
 - Disseminate ORD tools, models, data and guidance
 - Raise awareness of sustainable alternatives

SHC Program is:

- **providing tools, models, and approaches to support HIAs**
- **demonstrating HIA as an approach to integrate and weigh trade-offs in community decision-making**



HIA of Proctor Creek Boone Boulevard Green Street Project

Decision: Implementation of a green infrastructure project along Joseph E. Boone Boulevard, NW (in concert with road diet project)

Decision-Makers: City of Atlanta, Georgia

Role of HIA: Evaluate potential positive and negative health impacts of the green street project design and inform stakeholder decisions



Region 4 – Office of Environmental Justice
Office of Research and Development

HIA Partners:



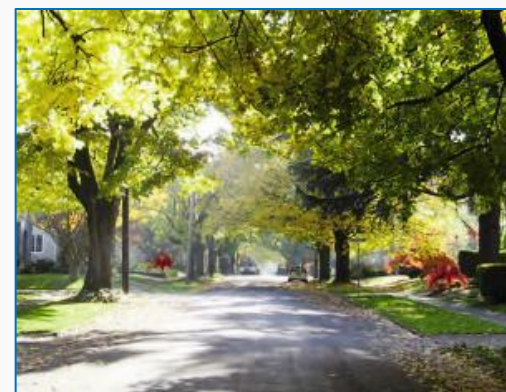


What is Green Infrastructure?

- A non-traditional approach
- Purpose: To maintain healthy waters, protect the environment, promote health, and support sustainability
- Uses natural processes:
 - ❖Vegetation
 - ❖Soil Filtration
 - ❖Shading
 - ❖Water Conservation
 - ❖Carbon Sequestration
 - ❖Stormwater Management

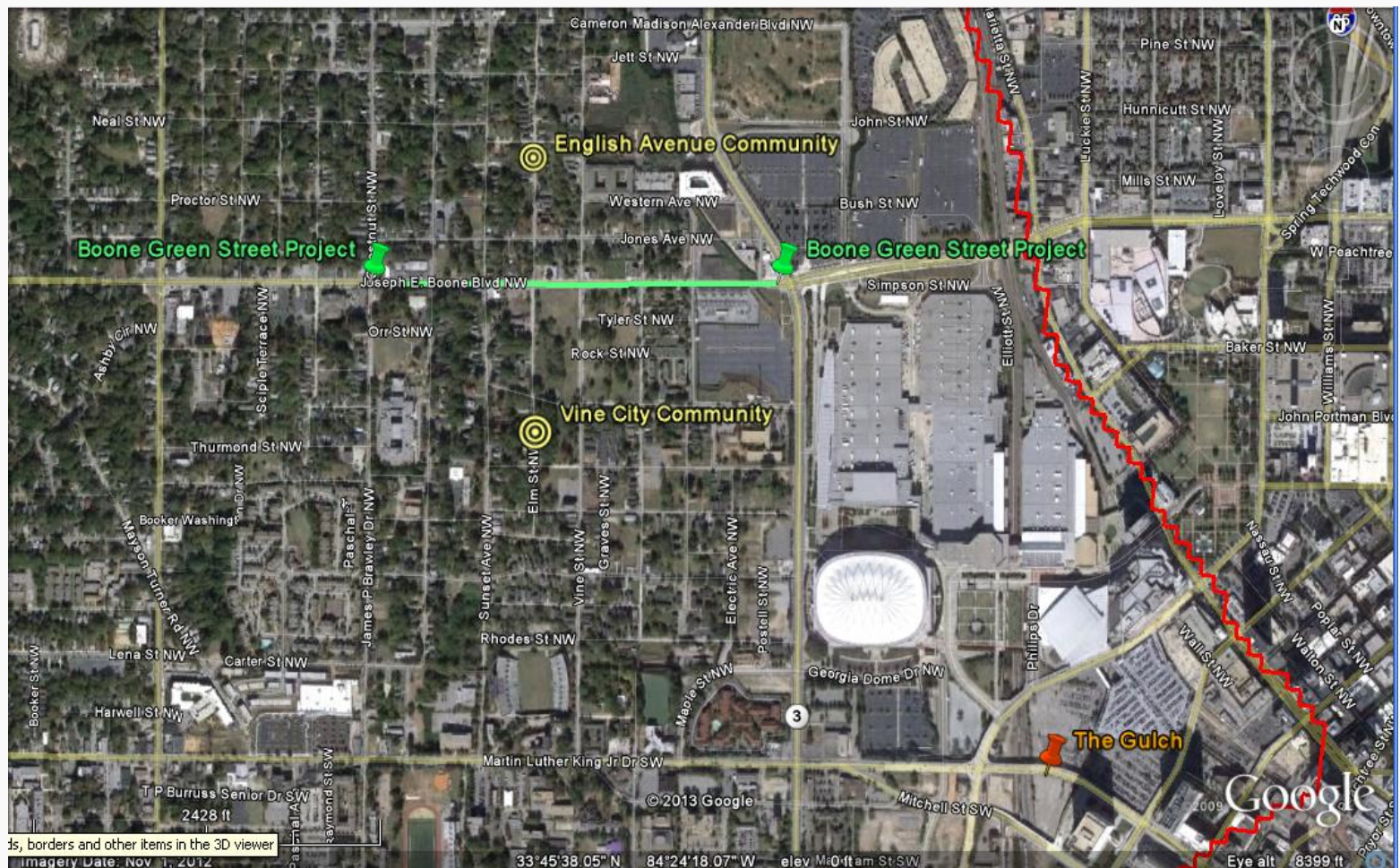


Planter Boxes



Urban Tree Canopy

Location of the Green Street Project





Defining the Community of Concern

This Community: Predominantly low income, minority population

Environmental Problems Facing This Community:

- Pervasive Flooding
- Impaired Water Quality
- Poverty
- Derelict Properties
- Aging Infrastructure





Developing Partnerships and Engaging Stakeholders

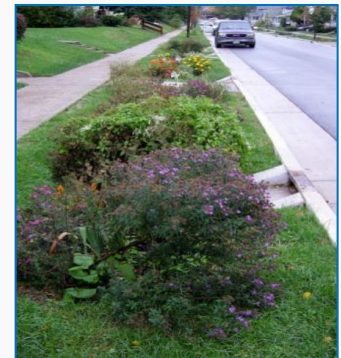
- Leveraged the HUD-DOT-EPA Partnership for Healthy Communities
- Participation from multiple levels and agencies:
 - Federal (8)
 - University (7)
 - NGOs (3)
 - Community Orgs (10)
 - County (1)
 - City (1)
- Participation from multiple sectors:
 - Environmental Protection
 - Housing and Urban Development
 - Forest Service
 - Emergency Planning
 - Public Health
 - Transportation
 - Education



HIA of Proctor Creek Boone Boulevard Green Street Project

HIA and SHC Program

- Provide a model of interagency collaboration at the local, state, and federal levels
- Gain experience in the application of HIAs in other environmental decision-making processes
- Create better understanding of direct and indirect public health benefits from implementing green infrastructure



Bioretention



Permeable
Pavement